ENTERED

February 28, 2019 David J. Bradlev. Clerk

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION

| ARROWS UP, LLC, | § |
|------------------------------------|---------------------------------------|
| | § |
| Plaintiff, | § |
| VS. | §CIVIL ACTION NO. 4:17-CV-1945 |
| | § |
| U.S. SILICA HOLDINGS, INC., et al, | § |
| | § |
| Defendants. | § |

MEMORANDUM & ORDER

Before the Court are the claim construction briefs filed by both parties in this patent infringement suit. On February 13, 2019, the Court held a hearing, in accordance with *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996), during which the parties presented argument in support of their proposed constructions. After considering the arguments of counsel, the evidence, and the applicable law, the Court finds that the disputed claims of the patents-in-suit should be construed as set forth herein.

I. <u>BACKGROUND</u>

This is a patent infringement case concerning patents for bulk shipping containers. The containers are specially designed to hold a large quantity of sand for fracking, with a spout at the bottom for easy unloading. Plaintiff Arrows Up, LLC filed suit against Defendants on June 26, 2017. (Doc. No. 1). Plaintiff and Defendants were both in the business of producing bulk shipping containers for granular materials like sand. (Doc. No. 30.) Plaintiff claims that it

developed certain innovations in the containers, which it then patented, specifically,

- 1. A cube-like shape instead of the more common rectangular shape;
- 2. A base structure comprising a pallet that had openings suitable for the receipt of forklift tines;
- 3. A lower sliding gate for removing material from the container;
- 4. External support elements to fortify the walls and enable the storage of heavier contents; and
- 5. Stacking elements that permit the containers to be stacked one atop the other without the use of spacers.

(Doc. No. 30 at 5.)

Plaintiff claims Defendants' product began as rectangular shipping containers with internal braces and hatches that swung open to release materials. (Doc. No. 30 at 3.) Defendants' containers could not be stacked directly on top of each other, requiring spacers to be placed between containers. (Doc. No. 30 at 3.) After the publication of Plaintiff's patent application, Plaintiff claims that Defendants updated their product to include protected elements of Plaintiff's design. (Doc. No. 30 at 5.) Plaintiff claims the new design included a cube shape, a base designed for forklift tines, a lower sliding gate, external wall supports, and stacking elements. (Doc. No. 30 at 5.) Plaintiff brings five counts of patent infringement, based on five separate patents related to their container design. (Doc. No. 30.)

Defendants and Counter Claimant Sandy Creek Capital, LLC filed counterclaims against Plaintiff and Counterclaim Defendants Arrows Up, Inc. and John Allegretti. (Doc. No. 83 at 35.) Defendant Sandbox argues that it is the owner of Plaintiff Arrows Up's patents, and that a Sandbox employee is a co-inventor. Defendants bring counterclaims for (1) declaratory

judgments of non-infringement of each of the patents-in-suit, (2) breach of an NDA, (3) breach of a settlement agreement, (4) declaratory judgment of patent ownership, and (5) declaratory judgments of invalidity and/or unenforceability of the patents-in-suit. (Doc. No. 83 at 49-75.)

Defendants claim that Plaintiff had no experience or customers in the frac sand industry before 2014, instead focusing on lighter weight materials like golf balls. (Doc. No. 83 at 37.) In 2014, Defendant Sandbox and Plaintiff Arrows Up entered into a contract under which Plaintiff would attempt to create a version of Defendant's container out of plastic. (Doc. No. 83 at 37-39.) The contract included an NDA and provisions that assigned all intellectual property arising out of the relationship to Defendant Sandbox. (Doc. No. 83 at 38-39.) Pursuant to this agreement, Defendant Sandbox sent Plaintiff technical drawings and product examples. (Doc. No. 83 at 39.) Plaintiff produced a plastic version of the Sandbox container, but Defendant claims it did not live up to expectations. (Doc. No. 83 at 41.) Defendant Sandbox told Plaintiff it would have to put the plastic container project on hold. (Doc. No. 83 at 41.)

Defendants claim that at this time Plaintiff was being hounded by creditors. (Doc. No. 83 at 41-42.) They allege that, after it became clear that the relationship with Defendant Sandbox would not provide a steady stream of income, Plaintiff decided, in violation of the contract, to sell the plastic prototype it built for Defendant Sandbox. (Doc. No. 83 at 41.) According to Defendants, Plaintiff filed new patent applications in October 2014 that it claimed were mere continuations of previous applications from 2010, but in fact broadened the claim language to intentionally cover Defendant Sandbox's container design. (Doc. No. 83 at 42.)

Defendant Sandbox sued Plaintiff Arrows Up in state court in December of 2014. (Doc. No. 83 at 44.) The parties entered into a settlement agreement. (Doc. No 83 at 44.) Defendants

claim that Plaintiff continued to advertise its infringing product in violation of the settlement. (Doc. No. 83 at 45.) Defendant Sandbox brought a new suit in state court in January of 2016. (Doc. No. 83 at 46.) Plaintiff filed this suit in federal court for patent infringement in June of 2017. (Doc. No. 1.) Defendants claim that Plaintiff applied for several of the patents-in-suit the same week it filed its federal complaint against Defendants. (Doc. No. 83 at 48.)

Defendants argue that Plaintiff filed this case not to protect its intellectual property, but instead to retaliate against Defendants for suing Plaintiff in state court for breach of contract, fraud, and conversion. (Doc. No. 83 at 2.) Defendants posit that Plaintiff was attempting to gain leverage to force a settlement in the state court case. (Doc. No. 83 at 2.) The state court case ended on October 2, 2018, after a jury found that Plaintiff Arrows Up was liable for breach of contract and fraud. (Doc. No. 83 at 2.) The Court awarded Defendant Sandbox almost fifty million dollars in damages, issued a declaratory judgment that the containers sold by Plaintiff Arrows Up after January 2015 are the property of Defendant Sandbox, and ordered Plaintiff Arrows Up to give the containers back to Sandbox. (Doc. No. 83 at 2.)

Defendants further claim that Plaintiff Arrows Up hired a publicity firm to make misleading statements to stock analysts of Defendant U.S. Silica, with the aim of tanking Defendant U.S. Silica's stock price. (Doc. No. 83 at 3.) Defendants claim that Plaintiff's patents were filed with the intent to capture technology already in use by Defendant Sandbox. (Doc. No. 83 at 3.) Plaintiff had access to information about Defendant Sandbox's products—including blueprints and an example container—due to the prior contract between the parties, which included a non-disclosure agreement. (Doc. No. 83 at 3.)

A. PATENTS-IN-SUIT

1. Patent No. 9,617,065 ("065") (Oct. 16, 2014) (Doc. No. 30-1)

This patent is a continuation of Application No. 13/249,688, which became Patent No. 8,887,914 (Sept. 30, 2011). Patent No. 8,887,914 was a continuation of Application No. 12/914,075, which became Patent No. 8,616,370 (Oct. 28, 2010).

2. Patent No. 9,758,993 ("993") (June 23, 2017) (Doc. No. 30-2)

This patent is a continuation of Application No. 15/471,896, which became Patent No. 9,988,182. Patent No. 9,988,182 was a continuation of Patent No. 065.

3. Patent No. 9,783,338 ("338") (June 26, 2017) (Doc. No. 30-3)

This patent is a continuation of Patent No. 993, which was a continuation of Patent No. 065.

4. Patent No. 9,796,504 ("504") (June 27, 2017) (Doc. No. 30-4)

This patent is a continuation of Patent No. 338, which was a continuation of Patent No. 993.

5. Patent No. 9,828, 135 ("135") (Oct. 19, 2017) (Doc. No. 30-5)

This patent is a continuation of Patent No. 504, which was a continuation of Patent No. 338.

B. DISPUTED TERMS

The parties dispute the meaning of the following terms in the claims: (1) "tubular nesting support"; (2) "generally rectangular tubular section"; (3) "nesting support positioned at the [] top corner"; (4) "nesting support defining an opening extending through the nesting support"; (5) "wedge-shaped bottom wall support;" (6) "compartment mounted on [and supported by] the pallet"; (7) "interior bottom wall"; (8) "W-shaped corner section"; and (9) "approximately 80%." Defendants also argue that the terms "said compartment" and "the tubular nesting supports" are impermissibly vague.

II. APPLICABLE LAW

In patent law, "the claims define the metes and bounds of a patented invention in the same way that a deed to property describes the borders between adjacent tracts of land." Robert J. Goldman, Schwartz's Patent Law and Practice 190 (8th ed. 2015). Claim construction is a question of law decided by the court. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 385 (1996).

Words in a claim are "generally given their ordinary and customary meaning," defined as the "meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). The exceptions to the ordinary meaning rule are (1) when the patent applicant acts as his own lexicographer and explicitly defines the term, and (2) when the specification "reveal[s] an intentional disclaimer, or disayowal, of claim scope by the inventor." *Id.* at 1315-16.

Courts construing claim terms prioritize intrinsic evidence, defined as the patent

document and its prosecution history, over extrinsic evidence, such as dictionaries and expert testimony. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Specifically, "[t]he hierarchy of evidence to determine claim scope and meaning is (1) claim language itself, read in light of the specification; (2) the specification; (3) the prosecution history, if it is placed in evidence; and (4) extrinsic evidence." Goldman, *supra*, at 166-67. If the intrinsic evidence alone resolves any ambiguity in a claim term, the court should not look to extrinsic evidence. *Vitronics Corp.*, 90 F.3d at 1583.

Claims will be held invalid if they are so indefinite that they "fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2010).

III. ANALYSIS

A. "TUBULAR NESTING SUPPORT"

Plaintiff's proposed construction for this term is "nesting support that is hollow." Defendant proposes instead, "rounded, elongated, and hollow nesting support." Both parties point to Figure 89 from Patent No. 065 as an exemplary embodiment of what the patentee intended the phrase "tubular nesting support" to encompass. (Doc. No. 1-1 at 107.) The Court finds Plaintiff's construction overly broad; many hollow items are not "tubular." In contrast, the Court finds Defendant's proposal too narrow. The nesting support depicted in Figure 89 does not appear especially elongated, and any rounding is limited to the edges. Defendant's suggested construction brings to mind a pipe rather than the nesting support depicted in Figure 89. See e.g., Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc., 340 F.3d 1298, 1308 (Fed. Cir. 2003)

("[I]t is axiomatic that a claim construction that excludes a preferred embodiment . . . is rarely, if ever, correct"). Thus, the Court adopts the following construction: "nesting support that is hollow with rounded edges."

B. "GENERALLY RECTANGULAR TUBULAR SECTION"

Plaintiff suggests that the Court construe this term as "approximately rectangular hollow section." Defendant proposes instead "generally rectangular rounded, elongated, and hollow section." This dispute between the parties once again centers on the word "tubular." The Court, consistent with its decision above, adopts the construction "generally rectangular hollow section with rounded edges."

C. "NESTING SUPPORT POSITIONED AT THE TOP CORNER"

Plaintiff suggests that no construction is necessary for this term, as it carries its plain and ordinary meaning. Defendant argues that the term should be construed as "rounded, elongated, and hollow nesting support positioned above the [] corner."

Defendant's argument is based on the prosecution history of a prior patent not currently at issue, Patent No. 914. (Doc. No. 51-7.) That patent uses the phrase "nesting supports . . . above the top wall." (Doc. No. 51-7.) The patentee distinguished its patent from an existing patent that placed corner caps below the top wall. However, the claim at issue in Patent No. 914 referenced the "top wall," not the "top corner" as in this set of patents-in-suit. *See Regents of Univ. of Minn. v. AGA Med. Corp.*, 717 F.3d 929, 943 (Fed. Cir. 2013) ("In general, a prosecution disclaimer will only apply to a subsequent patent if that patent contains the same claim limitations as its predecessor."); *Saunders Grp., Inc. v. Comfortrac, Inc.*, 492 F.3d 1326,

1333 (Fed. Cir. 2007) ("When the purported disclaimers are directed to specific claim terms that have been omitted or materially altered in subsequent applications (rather than to the invention itself), those disclaimers do not apply."). The Court thus rejects Defendant's argument. The Court finds that no construction of this term is necessary.

D. "NESTING SUPPORT DEFINING AN OPENING EXTENDING THROUGH THE NESTING SUPPORT"

Plaintiff argues the proper construction of this term is "nesting support in which there is an opening." Defendant proposes instead "rounded, elongated, and hollow nesting support defining an opening extending through the nesting support." The Court adopts the construction "hollow nesting support with an opening extending throughout."

E. "WEDGE-SHAPED BOTTOM WALL SUPPORT"

Plaintiff's proposed construction for this term is "a support having a sloped surface such that it supports a downwardly angled section of the bottom wall." Defendant argues that the Court need not construe this term, as it carries its plain and ordinary meaning. The Court agrees with Defendant. The only potential ambiguity in the claim language is which "bottom wall" the wedge supports, as there is both an "interior bottom wall" and an "exterior bottom wall." A person of ordinary skill in the art, however, would know that there is no need to support the exterior bottom wall, which rests on the pallet. Therefore, it would be clear to a person of ordinary skill in the art that the wedge supports the interior bottom wall, and the term needs no construction.

F. "COMPARTMENT MOUNTED ON [AND SUPPORTED BY] THE PALLET"

Plaintiff suggests that this term does not require construction. Defendant disagrees, and proposes that the Court construe the term as "exterior walls of the compartment directly attached to [and supported by] the pallet." The patent "repeatedly and consistently" characterizes the compartment as being directly attached to the pallet through fasteners or other forms of attachment. *GPNE Corp. v. Apple Inc.*, 830 F.3d 1365, 1370 (Fed. Cir. 2016) ("[W]hen a patent 'repeatedly and consistently' characterizes a claim term in a particular way, it is proper to construe the claim term in accordance with that characterization."). (Doc. No. 1-1 at 110-111, 133.) The Court accepts Defendant's suggestion, and adopts the construction "exterior walls of the compartment directly attached to and supported by the pallet." *See Outillage v. Penn Tool Co., Inc.*, 2004 WL 5644803, at *4 (C.D. Cal. Mar. 22, 2004) (construing the term "mounted on" to mean "fixed securely to, and in direct physical contact with, a support").

G. "INTERIOR BOTTOM WALL"

Plaintiff argues that the Court need not construe this term, because it carries its plain and ordinary meaning. Defendants propose that the Court construe this term as "inclined wall within the compartment." The Court finds that there is a potential ambiguity in this term, which might refer to a wall distinct from, and interior to, the exterior bottom wall, or to the innermost side of the exterior bottom wall. In light of this ambiguity, the Court cannot accept Plaintiff's suggestion. *See O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008) ("A determination that a claim term 'needs no construction' or has the 'plain and ordinary meaning' may be inadequate when a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute.").

The Court adopts Defendant's suggestion, which places the interior bottom wall inside the compartment. Plaintiff argues that the claim covers an embodiment in which the downwardly angled sections are the only bottom wall, in addition to the embodiments shown in the patent, which depicts an interior bottom wall composed of downwardly angled sections and an additional exterior bottom wall that rests on top of the pallet. (Doc. No. 1-1 at 18.) However, the Court cannot ignore the presence of the term "interior" in the claim. *See e.g.*, *Becton*, *Dickinson & Co. v. Tyco Healthcare Grp.*, *L.P.*, 616 F.3d 1249, 1257 (Fed. Cir. 2010) ("Claims must be interpreted with an eye toward giving effect to all terms in the claim." (quoting *Bicon*, *Inc. v. Straumann Co.*,441 F.3d 945, 950 (Fed. Cir. 2006))); *Merck & Co.*, *Inc. v. Teva Pharm. USA*, *Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) ("A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so."). Further, Patent No. 065 describes the "bottom compartment" as including "a lower exterior bottom wall" and the "upper interior bottom wall." (Doc. No. 1-1 at 124.) This supports a reading of "compartment" that is not limited to the space above the interior bottom wall, as suggested by Plaintiff.

The Court construes the term as "downwardly angled sections forming a wall inside the compartment." The phrase "downwardly angled sections" is taken from a definition of the interior bottom wall provided in Patent No. 065. (Doc. No. 1-1 at 124.)

H. "W-SHAPED CORNER SECTION"

Plaintiff asks the Court to construe this term as "a corner section forming the shape of the letter 'W", while Defendant requests that the Court adopt the construction, "corner section formed by the combination of two L-shaped corner sections of adjacent exterior walls." Defendant relies on an embodiment described in Patent No. 065, which states that "[e]ach L-

shaped corner section of each panel of each exterior wall is configured to mate with the L-shaped corner of an adjacent exterior wall." (Doc. No. 1-1 at 125.). However, the patent goes on to state that "it should be appreciated that one or more of the corners can be configured differently." (Doc. No. 1-1 at 125.) Therefore, the Court will not limit the term to this particular embodiment. See Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1117 (Fed. Cir. 2004) ("[E]ven where a patent describes only a single embodiment, claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction." (internal quotation marks omitted)). The Court finds that no construction of the term is necessary.

I. "APPROXIMATELY 80%"

Plaintiff argues that no construction is necessary. Defendant suggests that the Court construe this term as "78-80%," because the various examples throughout the claim fall within this range. The Court finds that the examples given in the claim are not intended to limit the construction of this term. *See Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1217-18 (Fed. Cir. 1995) ("The use of the word 'about,' avoids a strict numerical boundary to the specified parameter."); *Raytheon Co. v. Indigo Sys. Corp.*, 682 F. Supp. 2d 717, 729-30 (E.D. Tex. 2010) ("The patentee chose to claim his invention without mathematical precision, so the court will not construe this term with mathematical precision except to the extent the intrinsic record provides clear guidance."). The term carries its plain and ordinary meaning, and no construction is necessary.

J. "SAID COMPARTMENT"

This term is reasonably definite when viewed in the context of the claim as a whole. The

formatting of the claim lines this term up with an immediately preceding description of a

"compartment." Thus, a person with ordinary skill in the art would know to which compartment

this term is referring.

K. "THE TUBULAR NESTING SUPPORTS"

This term is reasonably definite. The additional descriptor ("tubular") would not impede

a person of ordinary skill in the art from determining which nesting supports are being discussed.

IV. <u>CONCLUSION</u>

The disputed terms in the patents-in-suit are construed as set forth in this Order.

IT IS SO ORDERED.

SIGNED at Houston, Texas, on this the 28th day of February, 2019.

HON. KEITH P. ELLISON

UNITED STATES DISTRICT JUDGE

Les P. Ellis

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